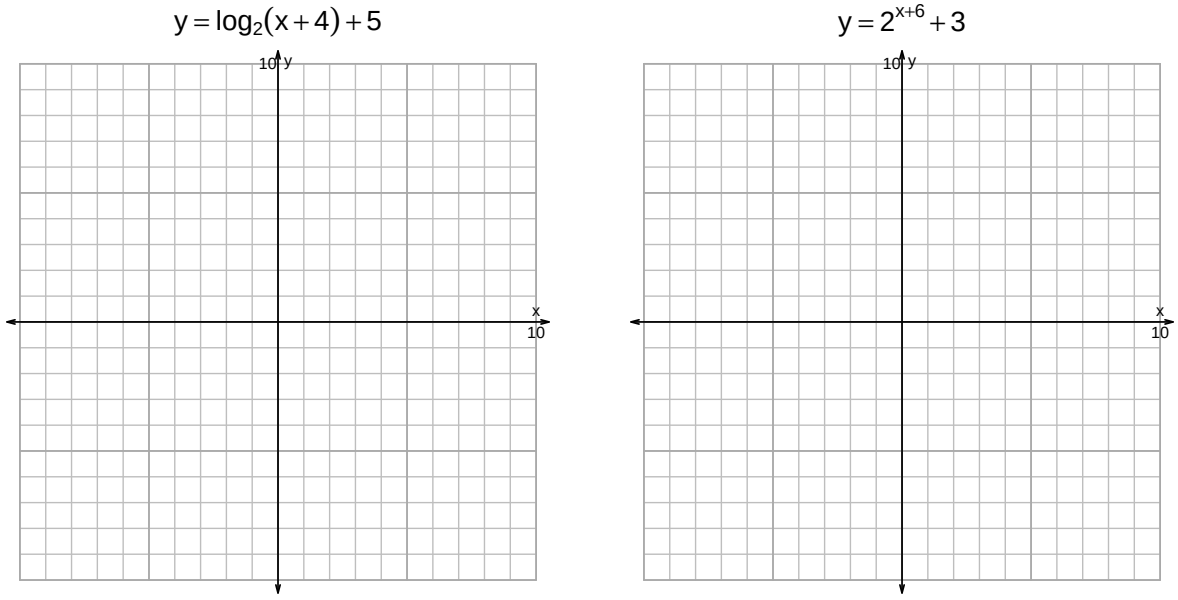
Name: Date:

S18QUIZ: EXP LOG (QUIZ V242)

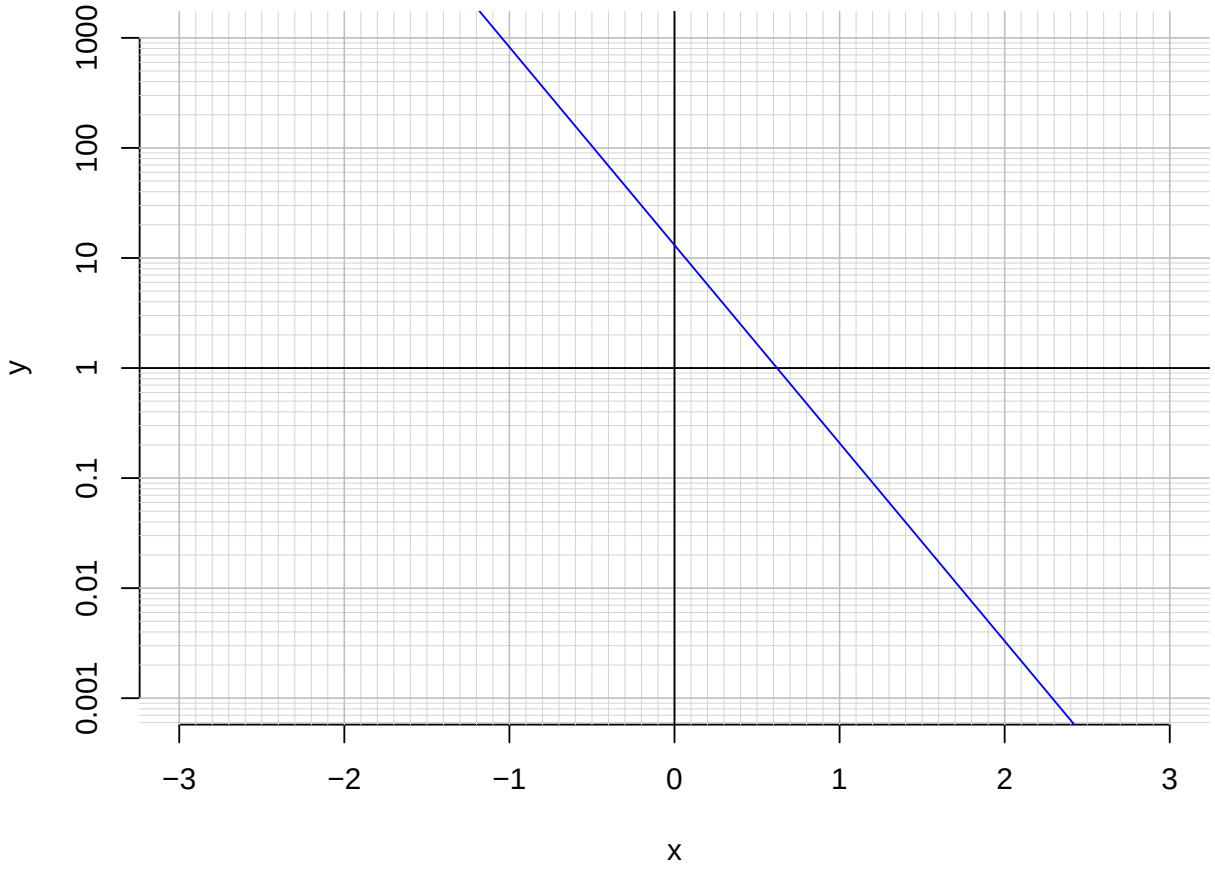
1. Graph $y = \log_2(x+4)+5$ and $y = 2^{x+6}+3$ on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$13 = \left(\frac{5}{3}\right) \cdot 2^{4t/7}$$

3. An exponential function $f(x) = 13.1 \cdot e^{-4.14x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate $f(1.9)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(30)$.